L1: Entry 2 of 6 File: USPT Apr 6, 1999

DOCUMENT-IDENTIFIER: US 5891465 A
TITLE: Delivery of biologically active material in a liposomal formulation for administration into the mouth

DEPR:
On the day of experimentation Baseline "0" melatonin levels were drawn. Two sprays of melatonin liposome spray formula was applied to sublingual area of the mouth. Saliva was allowed to accumulate for several minutes and then swallowed. Blood samples were drawn at 1/2 hour, 1 hour, 11/2 hours, 2 hours, 4 hours, 6 hours and 8 hours.

CLPR:
1. A liposomal composition suitable for the aerosol or spray delivery of melatonin to a subject, said composition comprising melatonin and optionally an additional supplement in phospholipid liposomes and a carrier wherein the liposomes have between about 20 nm and 10 microns in diameter and results in absorption into the blood stream, when administered, wherein the phospholipid liposome comprises one or more bilayer forming lipids, wherein said composition provides an increase in bioavailability of said supplement or drug of approximately 20 % or more when compared to an orally administered solid form, and wherein said composition comprises by weight percent, from about 0.25 to 20% lecithin, from about 0.025 to 2% cholesterol or zoosterol or phytosterol, from about 0.01 to 3% antioxidant, from about 0.05 to 0.4% melatonin, from about 0.1 to 20% glycerin, propylene glycol or butylene glycol, from about 0.1% to 10% ethanol, from about 0.015 to 4% anti microbial agent and from about 2 to 99.9% water.

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L1: Entry 1 of 6 File: USPT Jun 13, 2000

DOCUMENT-IDENTIFIER: US 6075045 A
TITLE: Method of treating paralysis of the extremities caused by cerebral infarction

BSPR:
Melatonin may be advantageously administered in a form in which it is encapsulated in an encapsulating matrix, liposomes or the like. Melatonin encapsulated in an encapsulating matrix or liposomes is gradually released into the blood so that its apparent residence time in the blood is increased, leading to an increase in the availability of melatonin.

BSPR:
When the melatonin is encapsulated in an encapsulating matrix or a liposome, its amount is expressed in terms of free (non-encapsulated) melatonin. Since melatonin in an encapsulated form is gradually released into the blood, its apparent residence time in the blood is longer. Thus, the melatonin blood concentration in the encapsulated form of melatonin may be lower than the above blood concentrations of melatonin in the free form.

CLPR:
4. The method of claim 1, wherein said melatonin is encapsulated in an encapsulating matrix or a liposome.

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**Search Results** - Record(s) 1 through 6 of 6 returned.

☐ 1. Document ID: US 6075045 A

L1: Entry 1 of 6 File: USPT Jun 13, 2000

US-PAT-NO: 6075045
DOCUMENT-IDENTIFIER: US 6075045 A

TITLE: Method of treating paralysis of the extremities caused by cerebral infarction

DATE-ISSUED: June 13, 2000

INVENTOR-INFORMATION:

| NAME | CITY | STATE | ZIP CODE | COUNTRY |
|---|---|---|---|---|
| Nishino; Hitoo | Nagoya | N/A | N/A | JPX |
| Borlongan; Cesario V. | Silver Spring | MD | N/A | N/A |
| Uneyama; Hisayuki | Kawasaki | N/A | N/A | JPX |

US-CL-CURRENT: 514/419

Full | Title | Citation | Front | Review | Classification | Date | Reference | Claims | KWIC | Draw Desc | Image

☐ 2. Document ID: US 5891465 A

L1: Entry 2 of 6 File: USPT Apr 6, 1999

US-PAT-NO: 5891465
DOCUMENT-IDENTIFIER: US 5891465 A

TITLE: Delivery of biologically active material in a liposomal formulation for administration into the mouth

DATE-ISSUED: April 6, 1999

INVENTOR-INFORMATION:

| NAME | CITY | STATE | ZIP CODE | COUNTRY |
|---|---|---|---|---|
| Keller; Brian C. | Antioch | CA | N/A | N/A |
| Fisher; Daniel L. | Pleasant Hill | CA | N/A | N/A |
| Kiss; Steven | Pittsburg | CA | N/A | N/A |

US-CL-CURRENT: 424/450; 424/43, 424/45, 424/727, 424/728, 424/734, 424/737, 424/766

Full | Title | Citation | Front | Review | Classification | Date | Reference | Claims | KWIC | Draw Desc | Image

☐ 3. Document ID: US 5716638 A

L1: Entry 3 of 6 File: USPT Feb 10, 1998

US-PAT-NO: 5716638
DOCUMENT-IDENTIFIER: US 5716638 A

TITLE: Composition for applying active substances to or through the skin

DATE-ISSUED: February 10, 1998

INVENTOR-INFORMATION:

| NAME | CITY | STATE | ZIP CODE | COUNTRY |
|---|---|---|---|---|
| Touitou; Elka | Jerusalem | N/A | N/A | ILX |

US-CL-CURRENT: 424/450; 264/4.1, 264/4.3, 424/401, 424/63

Full | Title | Citation | Front | Review | Classification | Date | Reference | Claims | KWMC | Draw Desc | Image

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☐ 4. Document ID: MX 9907684 A1, WO 9836736 A1, ZA 9801352 A, AU 9864969 A, CZ 9902925 A3, EP 981332 A1, CN 1248163 A, SK 9901110 A3, HU 200001464 A2, IT 1289938 B, KR 2000075479 A

L1: Entry 4 of 6 File: DWPI Jun 1, 2000

DERWENT-ACC-NO: 1998-467265
DERWENT-WEEK: 200133


TITLE: Lyophilised composition - comprises trehalose and lipid liposome(s) including water insoluble biologically active component

INVENTOR: CAVALLO, G; MARCHITTO, L

PRIORITY-DATA: 1997IT-MI00362 (February 20, 1997)

PATENT-FAMILY:

| PUB-NO | PUB-DATE | LANGUAGE | PAGES | MAIN-IPC |
|---|---|---|---|---|
| MX 9907684 A1 | June 1, 2000 | N/A | 000 | A61K009/127 |
| WO 9836736 A1 | August 27, 1998 | E | 020 | A61K009/127 |
| ZA 9801352 A | October 28, 1998 | N/A | 020 | A61K000/00 |
| AU 9864969 A | September 9, 1998 | N/A | 000 | A61K009/127 |
| CZ 9902925 A3 | January 12, 2000 | N/A | 000 | A61K009/127 |
| EP 981332 A1 | March 1, 2000 | E | 000 | A61K009/127 |
| CN 1248163 A | March 22, 2000 | N/A | 000 | A61K009/127 |
| SK 9901110 A3 | May 16, 2000 | N/A | 000 | A61K009/127 |
| HU 200001464 A2 | October 30, 2000 | N/A | 000 | A61K009/127 |
| IT 1289938 B | October 19, 1998 | N/A | 000 | A61K000/00 |
| KR 2000075479 A | December 15, 2000 | N/A | 000 | A61K009/127 |

INT-CL (IPC): A61K 0/00; A61K 9/127; A61K 9/19; A61K 31/41; A61K 38/13; B01F 0/00; B01J 0/00

Full | Title | Citation | Front | Review | Classification | Date | Reference | KWMC | Draw Desc | Image

☐ 5. Document ID: MX 9907683 A1, WO 9836735 A1, ZA 9801354 A, AU 9863987 A, CZ 9902926 A3, EP 973505 A1, SK 9901111 A3, CN 1255057 A, HU 200000910 A2, IT 1289939 B, KR 2000075480 A

L1: Entry 5 of 6 File: DWPI Jun 1, 2000

DERWENT-ACC-NO: 1998-467264
DERWENT-WEEK: 200133


TITLE: Aqueous pharmaceutical compositions - comprise active ingredient highly insoluble in water, e.g. lonidamine, melatonin, cyclosporin A or bindarit, dispersed in liposomes

INVENTOR: CAVALLO, G; MARCHITTO, L

PRIORITY-DATA: 1997IT-MI00363 (February 20, 1997)

PATENT-FAMILY:

| PUB-NO | PUB-DATE | LANGUAGE | PAGES | MAIN-IPC |
|---|---|---|---|---|
| MX 9907683 A1 | June 1, 2000 | N/A | 000 | A61K009/127 |
| WO 9836735 A1 | August 27, 1998 | E | 020 | A61K009/127 |
| ZA 9801354 A | October 28, 1998 | N/A | 017 | A61K000/00 |
| AU 9863987 A | September 9, 1998 | N/A | 000 | A61K009/127 |
| CZ 9902926 A3 | January 12, 2000 | N/A | 000 | A61K009/127 |
| EP 973505 A1 | January 26, 2000 | E | 000 | A61K009/127 |
| SK 9901111 A3 | June 12, 2000 | N/A | 000 | A61K009/127 |
| CN 1255057 A | May 31, 2000 | N/A | 000 | A61K009/127 |
| HU 200000910 A2 | October 30, 2000 | N/A | 000 | A61K009/127 |
| IT 1289939 B | October 19, 1998 | N/A | 000 | A61K000/00 |
| KR 2000075480 A | December 15, 2000 | N/A | 000 | A61K009/127 |

INT-CL (IPC): A61K 0/00; A61K 9/127; A61K 31/192; A61K 31/416; A61P 15/08

Full | Title | Citation | Front | Review | Classification | Date | Reference KWMC | Draw Desc | Image

☐ 6. Document ID: JP 2000510841 W, WO 9742938 A1, US 5891465 A, EP 928189 A1

L1: Entry 6 of 6 File: DWPI Aug 22, 2000

DERWENT-ACC-NO: 1998-008557
DERWENT-WEEK: 200045


TITLE: Liposomal formulation for administration as aerosol or liquid droplet spray - for drug or nutritional supplement administration either orally or nasally

INVENTOR: FISHER, D L; KELLER, B C ; KISS, S

PRIORITY-DATA: 1996US-0645894 (May 14, 1996)

PATENT-FAMILY:

| PUB-NO | PUB-DATE | LANGUAGE | PAGES | MAIN-IPC |
|---|---|---|---|---|
| JP 2000510841 W | August 22, 2000 | N/A | 028 | A61K009/127 |
| WO 9742938 A1 | November 20, 1997 | E | 032 | A61K009/127 |
| US 5891465 A | April 6, 1999 | N/A | 000 | A61K009/127 |
| EP 928189 A1 | July 14, 1999 | E | 000 | A61K009/127 |

INT-CL (IPC): A61K 9/12; A61K 9/127

Full | Title | Citation | Front | Review | Classification | Date | Reference | KWIC | Draw. Desc | Image

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| Terms | Documents |
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| melatonin same liposome$ | 6 |

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| USPT,JPAB,EPAB,DWPI,TDBD | l1 and thrombosis | 1 | L3 |
| USPT,JPAB,EPAB,DWPI,TDBD | l1 and edema | 1 | L2 |
| USPT,JPAB,EPAB,DWPI,TDBD | melatonin same liposome$ | 6 | L1 |

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| l1 and embolism | 1 |

**Database:** US Patents Full-Text Database; US Pre-Grant Publication Full-Text Database; JPO Abstracts Database; EPO Abstracts Database; Derwent World Patents Index; IBM Technical Disclosure Bulletins

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**Today's Date: 9/21/2001**

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|---|---|---|---|
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| USPT,JPAB,EPAB,DWPI,TDBD | l1 and thrombosis | 1 | L3 |
| USPT,JPAB,EPAB,DWPI,TDBD | l1 and edema | 1 | L2 |
| USPT,JPAB,EPAB,DWPI,TDBD | melatonin same liposome$ | 6 | L1 |